Title V Operating Permit Number: CB-ROP 05-01 Prevention of Significant Deterioration Permit Number: NSR 4-4-11; SE 87-01 Desert View Power, LLC Mecca, California

EPA Responses to Public Comments

September 30, 2020

<u>Comments on Draft Title V Operating Permit from Desert View Power, LLC (DVP) Submitted August 5, 2020</u>

- 1. Part 71 Permit Condition II.A.6: please update 1.1E-01 lb/MMBtu unit to 0.11 lb/MMBtu for easier reference.
 - <u>EPA Response</u>: We agree with this comment; 1.1E-01 lb/MMBtu unit has been re-written as 0.11 lb/MMBtu. The proposed permit condition was based on the underlying applicable requirement that listed the emissions limit in scientific notation. This revision does not change the applicable emissions limitation.
- 2. Part 71 Permit Condition II.A.6.a: please update 1.4E-01 lb/MMBtu to 0.14 lb/MMBtu for easier reference.
 - <u>EPA Response</u>: We agree with this comment; 1.4E-01 lb/MMBtu has been re-written as 0.14 lb/MMBtu. The proposed permit condition was based on the underly applicable requirement that listed the emissions limit in scientific notation. This revision does not change the applicable emissions limitation.
- 3. Part 71 Permit Condition II.B.1.g: "no open storage of petroleum coke shall be allowed". DVP is requesting the description here be updated to be consistent with the language already used in Table I.B (Partial enclosed building). No modification is being made to the referenced storage, but the description is not accurate.
 - <u>EPA Response</u>: Condition II.B.1.g derives from the PSD permit and is based on an evaluation of Best Available Control Technology (BACT) at the time of the original permit issuance or modification. EPA is only making administrative revisions to the PSD permit at this time. We believe the suggested change would require a more substantive review of the underlying condition, and accordingly could not be made within the context of an administrative revision to the PSD permit. DVP can either submit a PSD permit revision request or modify their petroleum coke storage facility to align with the permit requirement.

- 4. Part 71 Permit Condition II.B.5.f.: Emergency Engine. Please include the specific requirements (i.e., 100 hr/yr) from the federal standard in the Title V document.
 - <u>EPA Response:</u> EPA agrees with this comment. Specific requirements pursuant to 40 CFR part 63, subpart ZZZZ for the both the emergency engine (EU-09) and the fire pump (EU-10) have been added to Condition II.B.5. EPA notes that 40 CFR 63.6640(f)(1), which states "there is no time limit on the use of emergency stationary RICE in emergency situations," is inapplicable to the Permittee because PSD Condition IX.D.6 limits emergency engine use to 200 hours per year. Therefore, in line with the Permittee's request, we are also modifying to Condition II.H.1 to state that non-applicable requirements include the provisions at 40 CFR 63.6640(f)(1).
- 5. Part 71 Permit Condition II.C.2.d: Please strike the second sentence ("Use a measurement span value of 2 times the concentration of the applicable emission limit.") DVP will comply with the EPA methods listed in this condition.
 - <u>EPA Response:</u> We agree with this comment and have made the requested revision at Condition II.C.2.d. EPA notes that the criteria for measurements and testing are contained in EPA Test Methods 1-4 and 10.
- 6. Part 71 Permit Condition II.C.24: This condition currently reads as "Such system shall be calibrated to alarm when the opacity reaches an opacity of 7.5%, which shall indicate a bag leak and the need for the following corrective action:" DVP requests that this be clarified to state that the alarm point is based on an hourly average of 7.5%. It should also be noted that bag leaks are not the only potential cause for a high opacity reading. Therefore, DVP is suggesting the following replacement sentence: "Such system shall be calibrated to alarm when the hourly average opacity reaches 7.5% which will trigger the need for the following corrective actions:"
- 7. Part 71 Permit Condition II.C.24.b (page 22): This condition currently reads as "b. If the issue causing the alarm cannot be corrected within 1 hour, shutdown of the boiler(s) and fabric filter system" The language for the required response as written could impose an artificial limit that is more restrictive than the permitted 10% opacity limit. DVP requests that this sentence be replaced with:
 - "b. If the issue causing the alarm cannot be corrected and Permittee cannot maintain compliance with the 10% opacity limit, then Permittee shall curtail operations to maintain compliance with applicable limits in this permit."

Additionally, the Statement of Basis would need to be updated to reflect the final language in the Title V.

8. Part 71 Permit Conditions II.C.24 and II.C.24.b: Additional Note: In the instance of a possible bag leak, Desert View Power has the capability to use baghouse process monitoring to help identify potential bag leaks. This is a helpful troubleshooting tool that allows Desert View to identify areas

for corrective action while operating and not shut down, all while complying with the opacity limit. Troubleshooting is typically conducted online.

<u>EPA Response to Comments 6, 7 and 8:</u> We agree with these comments in part and we disagree in part. We agree that the alarm point for an excursion of the PM₁₀ and opacity limits should be based on an hourly average, consistent with the averaging period for Condition II.A.7 of the part 71 permit. We also agree that not all excursions are caused by bag leaks and are removing that statement from the permit. While we disagree with DVP's suggested language for revising Condition II.C.24.b, upon review of this comment, we are making additional revisions to Condition II.C.24 to add clarifications and address the concern of being required to shut down a boiler when the opacity may still be less than 10%.

Consistent with 40 CFR 64.6(c)(2), we are clarifying that an hourly average opacity of 7.5% is defined as an excursion for the PM₁₀ and opacity limits. The Statement of Basis discusses the basis for the 7.5% value. An excursion triggers corrective action per 40 CFR 64.7(d) and is intended to provide the permittee time to investigate and correct any potential issues that could lead to an exceedance and potential violation of the PM₁₀ and/or opacity limit. We agree that actions other than shutting down the system can be taken, but at no time can conditions allow exceedances of permitted limits. Additionally, for DVP, we expect compliance with the opacity limit to correlate with compliance with the PM₁₀ limit. Therefore, we are revising Condition II.C.24 of the part 71 permit to require a shutdown of the boilers if the opacity exceeds the 10% limit in Condition II.A.7 of the part 71 permit. EPA modified Condition II.C.24 of the part 71 permit to read:

II.C.24: To comply with the requirements of 40 CFR 64.7 and maintain continuous compliance with the PM_{10} emission limit in II.A.4 and the opacity limit in II.A.7, the Permittee shall maintain and operate a continuous opacity monitoring system that continuously measures the stack gas opacity in Boilers 1 and 2. An excursion of the PM_{10} emission limit shall be defined as an opacity reading that exceeds the average hourly opacity reading of 7.5%. An excursion of the PM_{10} and/or opacity limit shall be defined as an hourly average that exceeds 7.5%. The monitoring system shall be calibrated to alarm when an excursion occurs which will trigger the need for the following corrective action steps:

- a. Immediate investigation into the cause of the alarm.
- b. If at any time during the corrective action steps in Condition II.C.24, the stack gas opacity exceeds the 10% limit in Condition II.A.7, the Permittee shall immediately shut down the boiler(s) and associated fabric filter(s) and report any permit deviation pursuant to Condition III.C.
- c. Maintenance or replacement of the fabric filter component(s).
- d. Return of units to normal operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

e. Reporting and recordkeeping pursuant to section II.D and II.E of this permit and appropriate facility wide reporting in accordance with section III.C.1 of this permit.

Appropriate revisions consistent with this response were incorporated in the final Statement of Basis (SOB) (Sections 8.7 and 9.2). Also, see response to comment 16.

9. Part 71 Permit Condition II.D.9: Desert View requests the last sentence and items a-q of this section be stricken, as shown in the following edits:

"The Permittee shall maintain a log of continuous opacity monitoring data and submit the most recent six months of data to EPA in the semi-annual monitoring reports required by condition III.C.1. At a minimum, the log shall contain the following records:

- a. Daily report trends: hourly, daily and average baghouse inlet and outlet temperature b. Hourly average pico amps (pA) reported as gr/dscf
- c. Alarm level
- d. Total number of bag leak alarms per month e. Date, time, and duration of each alarm
- f. Description of each alarm
- g. Corrective action taken (if any) in response to each bag leak alarm h. Corrective action cause and response time detail
- i. Total process running time period.
- j. Percentage of time in alarm for period. k. Monthly high pΛ, reported as gr/dscf l. Monthly low pΛ, reported as gr/dscf
- m. Monthly Average pA, reported as gr/dscf n. Monthly high opacity reading
- o. Monthly low opacity reading
- p. Monthly average opacity reading
- q. The dates of each bag leak inspection "

The items crossed out do not pertain to DVP. These items are intended for Bag Leak Detection Systems (BLDS), not Continuous Opacity Monitor System (COMS). Since DVP uses COMS for compliance assurance, not a Bag Leak Detection System. DVP will submit the data as requested in the 1st sentence ("The Permittee shall maintain a log of continuous opacity monitoring data and submit the most recent six months of data to EPA in the semi-annual monitoring reports required by condition III.C.1).

<u>EPA Response</u>: We agree with this comment and have made the requested revision at Condition II.D.9. EPA notes that the previous items were inadvertently lifted from an earlier draft version of the permit that assumed DVP's CAM approach which was based on bag leak detection.

<u>Comments on Draft Prevention of Significant Deterioration (PSD) Permit from DVP Submitted August</u> 5, 2020

10. PSD Permit Condition IX.B.8: "The Permittee shall install an enclosed petroleum coke storage facility; no open storage of petroleum coke shall be allowed." DVP is requesting the description here be updated to be consistent with the language already used in Table I.B (Partial enclosed building) of the Title V permit. No modification is being made to the referenced storage, but the description is not accurate.

EPA Response: We disagree with this comment. See response to comment 3 above.

11. PSD Permit Condition IX.K: "The Source is subject to the Standards of Performance for New Stationary Sources (NSPS) 40 CFR 60, Subparts A, Db, and E, including all emissions limits and all notification, testing, monitoring, and reporting requirements" Subpart E does not apply. This was noted in SOB, but not changed in permit.

EPA Response: We agree with this comment and have made the requested revision at Condition IX.K. The PSD permit originally included a condition that required compliance with Subpart E "Standards of Performance for Incinerators". We believe this was due to the inadvertent error that equated boilers to incinerators because they were allowed to burn certain waste streams as fuel. An incinerator is defined in Subpart E as "...any furnace used in the process of burning solid waste for the purpose of reducing the volume of the waste by removing combustible matter." While the permit authorizes the use of certain waste streams, its use in a boiler is as a fuel stream not to reduce the volume.

<u>Comments on EPA Region 9 Statement of Basis for Draft Part 71 and PSD Permit from DVP Submitted</u> <u>August 5, 2020</u>

12. Figure 2-1. Marker should be at the red arrow. The current marker is not on our property. [The submitted comment includes a map showing the indicated location.]

<u>EPA Response</u>: We agree there was an error in Figure 2-1 and have made the requested revision in the final SOB.

13. "Institutional" should be changed to Industrial. "two separate limestone silos" should be changed to 1 limestone silo.

<u>EPA Response</u>: We agree with this comment and have made the requested revisions to Section 4 of the final SOB. The use of "institutional" was a typographical error and, consistent with the part 71 permit renewal application, there is only 1 limestone silo.

14. Section 8. 40 CFR 63 Subpart A, General Provisions, should be added as a federal applicable requirement.

<u>EPA Response:</u> 40 CFR 63 Subpart A, General Provisions, is already listed as an applicable federal requirement (see Section 8.2 of the draft and final SOB).

- 15. Section 8.7, 4th Paragraph. "The COMS systems sets off an alarm at a specified opacity level. and is capable of detecting bag leaks and transmitting hi/low cleaning alarm signals". A COMS will detect high opacity levels that can be caused by a number of reasons but does not specifically detect a bag leak or transmit cleaning alarm signals. DVP requests the following replacement sentence: The COMS shall be calibrated to alarm when the hourly average opacity reaches the specified opacity level which will trigger the need for corrective action.
- 16. Section 8.7, 4th Paragraph. Requested edit to the sentence: "at which point the Permittee will be required to immediately shut down the boiler(s)". DVP should not have to shut down boiler at the "corrective action" level since it has the capability to correct the issue while the boiler and baghouse are operating and continue to operate below the emissions limit. DVP requests that this sentence be replaced with "at which point if the issue causing the alarm cannot be corrected and Permittee cannot maintain compliance with opacity limit, Permittee shall curtail operations to maintain compliance with applicable limits in this permit."

<u>EPA Response to Comments 15 and 16:</u> See responses to Comments 6, 7 and 8 above. We agree with these comments, in part; however, we disagree with DVP's suggested language. EPA has modified the 4th paragraph in Section 8.7 of the final SOB as follows:

The Permittee has installed a transmissometer, which is a continuous opacity monitoring system (COMS) that continuously measures the opacity from the boiler stacks to demonstrate compliance with a PM₁₀ emissions limit of 0.006 gr/dscf and an opacity limit of 10%. The Permittee conducted a correlation study on May 1, 2019 which consisted of source test measurements for PM₁₀ concurrent with opacity measurements from the COMS. The test results indicated an average PM₁₀ emission rate of 0.00049 gr/dscf (against a limit of 0.006 gr/dscf) correlated to an average opacity level of 2.75%. The COMS systems sets off an alarm at a specified opacity level. Part 64 requires monitoring that identifies one or more representative control device operational parameters and specifies an indicator range that will provide a reasonable assurance of compliance with the emission limit. The indicator range may consist of multiple values, or a minimum or maximum value. Accordingly, EPA is setting a maximum corrective action defining an excursion of the PM₁₀ and/or opacity limit of 7.5%, based on as an hourly average, that exceeds 7.5%. The monitoring system shall be calibrated to alarm when an excursion occurs which will trigger the need for corrective action steps including which include immediate investigation, appropriate maintenance, replacing fabric filter components, performing required reporting and recordkeeping actions, and returning the unit(s) to normal operation as expeditiously as practicable possible in accordance with good air pollution control practices for minimizing emissions. If at any time during the corrective action steps the stack gas opacity exceeds the 10% opacity limit the Permittee shall immediately shut down the boiler and fabric filter and report any permit deviation. Please see specific changes to Condition II.C.24 in Section 9.2 below.

17. Table 9-2 Monitoring in the Title V Permit

1.	opacity: 7.5% (CAM corrective action limit)	COMS
	opacity: 10% (3-min avg)	COMS
	opacity: 20% (6-min avg)	COMS
	CO: 45.0 lb/hr, 231 ppm, 320 ppm	CEMS, annual source test
	NO _x : 30.0 lb/hr, 94 ppm, 648 lb/day	CEMS, annual source test
	NO _x : NSPS limits of 43 ng/J (wood), 260 ng/J (coke), 130 ng/J (wood and gas), formula for coke + other	CEMS
	HC: 5.9 lb/hr	annual source test
2.	emergency generator: 200 hour/yr operation	recordkeeping
	HCl: .022 lb per MMBtu	HCl CEMS, SO2 CEMS or Dry Sorbent Injection Rate
3.	Mercury: 5.7E-06 lb per MMBtu	Mercury CEMS or Carbon Injection Rate
4.	HCl: .022 lb per MMBtu	recordkeeping
5.	PicoAmps maximum value	COMS

- 1. MACT requires a daily block average (10% opacity). Please add another line for opacity for the MACT requirement.
- 2. This is a SCAQMD Limit. RICE MACT limit is 100/yr non-emergency use. Please make one row for Emergency Generator and list as 100 hour/year non-emergency operation and add another row for the Emergency Fire Pump and list as 100 hour/year non-emergency operation.
- 3. Please add stack test (operating load) to Mercury CEMS or Carbon Injection rate. DVP does not have a Mercury CEMS or Carbon Injection.
- 4. Remove this. It is a duplicate of the HCl row above.
- 5. Remove. Picoamps are associated with a bag leak detection system, not COMS, and we do not have a bag leak detection system (BLDS).

<u>EPA Response</u>: We agree with these comments and have made the requested revisions to Table 9.2 of the final SOB as indicated below. These revisions are necessary to correct inadvertent errors and ensure the table summarizing the monitoring requirement is consistent with the part 71 permit conditions. Additionally, we note that DVP's request to add the MACT opacity requirement to this

table also requires an accompanying revision to the opacity limits in the part 71 permit, as noted below.

Requirement	Monitoring in Underlying
60 40 0 11 /1 07	Requirement
SO ₂ : 12.0 lb/hr, 27 ppm	CEMS, annual source test
90% SO ₂ reduction,	CEMS, annual source test
520 ng/J (1.2 lb/MMBtu)	
PM-10: 0.006 gr/dscf at 12% CO2 or 3.9 lbs/hr per	annual source test
boiler (3-hr average)	
PM: 43 ng/J	annual source test
(0.10 lb/MMBtu)	
opacity: 7.5% (CAM corrective action limit)	COMS
opacity: 10% (3-min avg)	COMS
opacity: 10% or highest hourly average (daily block)	COMS
measured during performance testing	
opacity: 20% (6-min avg)	COMS
CO: 45.0 lb/hr, 231 ppm, 320 ppm	CEMS, annual source test
NO _x : 30.0 lb/hr, 94 ppm, 648 lb/day	CEMS, annual source test
NO _x : NSPS limits of	CEMS
43 ng/J (wood),	
260 ng/J (coke),	
130 ng/J (wood and gas), formula for coke + other	
HC: 5.9 lb/hr	annual source test
Emergency generator (EU-09):	recordkeeping
200 hour/yr operation (Condition II.B.5.a)	
Emergency generator (EU-09):	recordkeeping
100 hour/yr operation (Condition II.B.5.b)	
Fire Pump (EU-10):	recordkeeping
200 hour/yr operation (Condition II.B.5.a)	
Fire Pump (EU-10):	recordkeeping
100 hour/yr operation (Condition II.B.5.b)	
HCl: .022 lb per MMBtu	HCI CEMS, SO2 CEMS or Dry
	Sorbent Injection Rate
Mercury: 5.7E-06 lb per MMBtu	Mercury CEMS, Carbon Injection
	Rate, or Mercury stack testing and
	unit specific limit for maximum
	operating load

In response to this comment, we also added Condition II.A.8 to the permit:

Condition II.A.8:

For each boiler, the Permittee shall maintain opacity to less than or equal to 10 percent opacity or the highest hourly average (daily block average) opacity reading measured during the performance test run demonstrating compliance with Condition II.A.6. [40 CFR 63.7500; (40 CFR Part 63, Subpart DDDDD, Table 4, Item 3)]